WHAT IS CLAIMED IS:

1. A method for reducing a mixture of a plurality of malto-oligosaccharide species to a DE of essentially zero, said plurality of malto-oligosaccharide species differing at least in DP value thus defining a DP profile for said mixture, the method comprising the steps of:

providing said malto-oligosaccharide mixture, and

catalytically hydrogenating said mixture of malto-oligosaccharide species under hydrogenation conditions suitable to substantially preserve the DP profile of said mixture, said catalytic hydrogenation being performed at a pressure of at least about 1500 psi.

2. Method according to claim 1, said method including a step of hydrogenating said mixture in the presence of a metal hydrogenation catalyst.

3. Method according to claim 2, said catalyst being a metal catalyst selected from the group consisting of platinum, palladium, ruthenium, rhodium, and activated nickel.

4. Method according to claim 3, said catalyst being activated nickel.

5. Method according to claim 4, said catalytic hydrogenation being performed at a temperature ranging from about 50° C to about 150° C.

6. Method according to claim 5, said catalytic hydrogenation being performed at a temperature ranging from about 100° C to about 130° C.

7. Method according to claim 6, said pressure ranging from about 1500 psi to about 3000 psi.

8. Method according to claim 6, said pressure ranging from about 1500 psi to about 2500 psi.

9. Process for the reduction of a malto-oligosaccharide mixture, the process comprising the steps of:

providing a catalytic bed including a hydrogenation catalyst;

providing a malto-oligosaccharide mixture including a plurality of malto-oligosaccharide species, said plurality of malto-oligosaccharide species differing at least in DP value thus defining a DP profile for said mixture,

continuously introducing a malto-oligosaccharide mixture and hydrogen to said catalytic bed under hydrogenation conditions sufficient to catalytically hydrogenate said mixture to substantially reduce the DE thereof, said conditions being suitable to substantially preserve the DP profile of said mixture, said catalytic hydrogenation being performed at a pressure of at least about 1500 psi.

10. Process according to claim 9, said catalyst being a metal catalyst selected from the group consisting of platinum, palladium, ruthenium, rhodium, and activated nickel.

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11. Process according to claim 10, said metal catalyst being activated nickel.

12. Process according to claim 9, said catalytic hydrogenation being performed at a pressure ranging from about 1500 psi to about 3000 psi.

13. Process according to claim 9, said pressure ranging from about 1500 psi to about 2500 psi.

14. Process according to claim 9, said pressure ranging from about 1500 psi to about 2000 psi.

15. Method for preparing a reduced malto-oligosaccharide comprising the steps of:

providing a starch;

hydrolyzing said starch to provide a mixture of malto-oligosaccharide species, said plurality of malto-oligosaccharide species differing at least in DP value thus defining a DP profile for said mixture; and

catalytically hydrogenating said malto-oligosaccharide species under hydrogenation conditions suitable to substantially preserve the DP profile of said mixture and to substantially reduce the DE of said mixture, said catalytic hydrogenation being performed at a pressure of at least about 1500 psi.

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16. Method according to claim 48, said pressure ranging from about 1500 psi to about 3000 psi.

17. Method according to claim 48, said pressure ranging from about 1500 psi to about 2500 psi.

18. Method according to claim 48, said pressure ranging from about 1500 psi to about 2000 psi.

19. Method for reducing a mixture of a plurality of oligosaccharide species to a DE of essentially zero, said plurality of oligosaccharide species differing at least in DP value thus defining a DP profile for said mixture, the method comprising the steps of:

providing said oligosaccharide mixture; and

catalytically hydrogenating said mixture of oligosaccharide species under hydrogenation conditions suitable to substantially preserve the DP profile of said mixture, said catalytic hydrogenation being performed at a pressure of at least about 1500 psi.

20. Method according to claim 19, said pressure ranging from about 1500 psi to about 3000 psi.

21. Method according to claim 19, said pressure ranging from about 1500 psi to about 2500 psi.

22. Method according to claim 19, said pressure ranging from about 1500 psi to about 2000 psi.

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